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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,757	04/17/2001	David J. Kinsella	500863.000017	8918

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EXAMINER	
BROWN, VERNAL U	
ART UNIT	**PAPER NUMBER**
2635	9

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/837,757	DAVID J. KINSELLA	
	Examiner	Art Unit	
	Vernal U Brown	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *20-34* is/are allowed.

6)☐ Claim(s) *1-19 and 35-39* is/are rejected.

7)☐ Claim(s) *13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *8* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

The application of David J. Kinsella for Fingerprint Sensor with Feature Authentication filed April 4, 17, 2001 has been examined. Claims 1-39 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-8, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Abtahi et al. US Patent 5509083.

Regarding claim 1, Abtahi et al. teaches a detector apparatus (figure 3), comprising:

A fingerprint sensor having a receiving portion that is configured to accept an authentication article (58) and detect features of the authentication article and reading at least a portion of the fingerprint of the user (col. 5 lines 54-60).

Regarding claim 2, Abtahi et al. teaches a feature detection sensor (60), in operative relation with the fingerprint sensor (figure 3), that detects predetermined features (col. 7 lines 31-40).

Regarding claim 4, Abtahi et al. teaches an interface (80) for communicating with a computer system, the computer system is evidenced by the storing of files which inherently include a computer (col. 7 line 66-col. 8 line 10).

Regarding claim 5, Abtahi et al. teaches a verification engine in operative relation with the computer system (the computer system is evidenced by the storing of files (col. 8 lines 5-8) which inherently include a computer), the fingerprint sensor, and the feature detection sensor for determining an identity of the user, wherein the fingerprint sensor provides: a first signal to the verification engine, the first signal being derived from the portion of the fingerprint (col. 8 lines 6-11), and the feature detection sensor provides: a second signal to the verification engine, the second signal being derived from at least one of the one or more predetermined features of the authentication article (col. 8 lines 1-6).

Regarding claim 6, Abtahi et al. teaches a database having a user storage, an authorization profile storage, and an audit log storage (col. 9 lines 8-11); and a comparator engine for comparing: the first signal indicative of the at least portion of the fingerprint with a first authentication signal corresponding to a stored copy of the fingerprint within the database, and the second signal indicative of the at least one of the one or more predetermined features of the authentication article with a second authentication signal corresponding to a stored copy of the one or more predetermined features of the authentication article within the database to provide an authorization signal for a secured application which is communicatively coupled to the computer system (col. 7 line 66-col. 8 line 10).

Regarding claim 7, Abtahi et al. teaches the authorization signal selectively provides an access to the secured application for securing the use of the user credit card (col. 8 lines 10-13).

Regarding claim 8, Abtahi et al. teaches the verification engine comprises: a database having user storage, authorization profile storage (col. 8 lines 1-10) , and an audit log storage (col. 9 lines 8-11).

Regarding claim 36, Abtahi et al. teaches a method for providing user access to a secured application, comprising:

reading the fingerprint of a user with a fingerprint sensor(col. 5 lines 57-60) ; detecting one or more features of an authentication article (card) with the fingerprint sensor (col. 6 lines 1-2); analyzing at least a portion of the fingerprint to derive a first indication for verifying an identity of the user (col. 6 lines 3-18);

analyzing at least one of the one or more features of the authentication article to derive a second indication for authenticating the fingerprint; and combining the first and second indications for selectively providing access to the secured application to the user (col. 7 line 66-col. 8 line 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of Ohnishi et al. US Patent 6525932.

Regarding claim 3, Abtahi et al. teaches a fingerprint sensor having an interface (80) for operably communicating with a computer system for determining the identity of a user (col. 8

lines 1-9) but is silent on teaching the fingerprint sensor is detachably coupled to the portable device. Ohnishi et al. in an art related portable device teaches a biometric unit that is detachable coupled to a computer by means of an expansion bus (col. 6 lines 10-15).

It would have been obvious to one of ordinary skill in the art for the fingerprint sensor to be detachably coupled to the portable device in Abtahi et al. as evidenced by Ohnishi et al. because Abtahi et al. suggests a fingerprint sensor having an interface for operably communicating with a computer system and Ohnishi et al. teaches a biometric unit that is detachable coupled to a computer by means of an expansion bus in order to add a security module to a portable device.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of Ohnishi et al. US Patent 6525932 and further in view of Russo U.S Patent 6681034.

Regarding claim 9, Abtahi et al. in view of Ohnishi et al. teaches a card (58) as a portable device but is silent on teaching the card is a smart card, Russo in an art fingerprint system teaches a smart card storing fingerprint template (col. 5 line 64-col. 6 line 1) and card further execute a fingerprint matching algorithm (col. 6 line 1-5).

It would have been obvious to one of ordinary skill in the art to have a smart card as a portable device in Abtahi et al. in view of Ohnishi et al. as evidenced by Russo because Abtahi et al. in view of Ohnishi et al. suggest a card (58) as a portable device for providing identification information and Russo teaches a smart card for providing identification information.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of Borza et al. U.S Patent 5991431.

Regarding claim 10, Abtahi et al. teaches the use of fingerprint sensor for confirming the identity of an individual in order to selectively provides an access to the secured application to the user (col. 8 lines 10-13) but is silent on teaching the fingerprint sensor is removably attached to a computer mouse having an interface for operably communicating with a computer system. Borza et al. in an art related biometric system teaches fingerprint sensor attached to a computer mouse having an interface for operably communicating with a computer system (col. 6 lines 37-45) and also teaches the fingerprint sensor is removably attached to a computer mouse (column 10 lines 47-48).

It would have been obvious to one of ordinary skill in the art to have a fingerprint sensor is removably attached to a computer mouse having an interface for operably communicating with a computer system in Abtahi et al. as evidenced by Borza et al. because Abtahi et al. suggests the use of fingerprint sensor for confirming the identity of an individual and Borza et al. teaches fingerprint sensor attached to a computer mouse having an interface for operably communicating with a computer system and also teaches the fingerprint sensor is removably attached to a computer mouse in order to ensure a service or application is access by an authorized person only.

Regarding claim 11, Abtahi et al. teaches the use of fingerprint sensor for confirming the identity of an individual in order to selectively provides an access to the secured application to the user (col. 8 lines 10-13) but is silent on teaching the fingerprint sensor is removably attached to a trackball having an interface for operably communicating with a computer system. Borza et al. in an art related biometric system teaches fingerprint sensor attached to a computer mouse having an interface for operably communicating with a computer system (col. 6 lines 37-45) and

also teaches the fingerprint sensor is removably attached to a computer mouse (column 10 lines 47-48). One skilled in the art recognizes that a trackball is conventionally used in place of a mouse as a pointing device and it is therefore obvious to attach a fingerprint sensor to a trackball.

It would have been obvious to one of ordinary skill in the art to have a fingerprint sensor is removably attached to a computer mouse having an interface for operably communicating with a computer system in Abtahi et al. as evidenced by Borza et al. because Abtahi et al. suggests the use of fingerprint sensor for confirming the identity of an individual and Borza et al. teaches fingerprint sensor attached to a computer mouse having an interface for operably communicating with a computer system and also teaches the fingerprint sensor is removably attached to a computer mouse in order to ensure a service or application is access by an authorized person only. One skilled in the art recognizes that a trackball is conventionally used in place of a mouse as a pointing device and it is therefore obvious to attach a fingerprint sensor to a trackball.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of Glaze et al. US Patent 6320974.

Regarding claim 12, Abtahi et al. teaches the use of fingerprint sensor for confirming the identity of an individual in order to selectively provides an access to the secured application to the user (col. 8 lines 10-13) but is silent on teaching the fingerprint sensor is detachably coupled to a camera. Glaze et al. in an art related biometric identification system teaches a fingerprint sensor detachably coupled to a camera (col. 6 lines 4-9).

It would have been obvious to one of ordinary skill in the art to have the fingerprint sensor detachably coupled to a camera in Abtahi et al. as evidenced by Glaze et al. because Abtahi et al. suggests the use of fingerprint sensor for confirming the identity of an individual

before allowing the user to use a service or equipment and Glaze et al. teaches a fingerprint sensor detachably coupled to a camera in order to verify the identity of the user.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of Li et al. US Patent 6219793.

Regarding claim 14, Abtahi et al. teaches the use of fingerprint sensor for confirming the identity of an individual (col. 8 lines 10-13) but is silent on teaching a fingerprint sensor detachably coupled to a telephone. Li et al. in an art related fingerprint system teaches the use of a fingerprint sensor to authenticate the user of a phone (col. 6 lines 63-67).

It would have been obvious to one of ordinary skill in the art to have a fingerprint sensor detachably coupled to a telephone in Abtahi et al. as evidenced by Li et al. because Abtahi et al. suggests the use of fingerprint sensor for confirming the identity of an individual and Li et al. suggests the use of a fingerprint sensor to authenticate the user of a phone to ensure that the phone is only used by an authorized person.

Claims 15-16, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of Frankfurt US Patent 4931629.

Regarding claims 15-16, Abtahi et al. teaches the use of a card (58) as an authentication article (col. 7 lines 32-36) but is silent on teaching the use of a precious gem as the authentication article. Frankfurt in an art related card security invention teaches the use of precious gem such as diamond as an authenticating article (col. 2 lines 26-35) using the exterior profile of the gem (col. 2 lines 27-31).

It would have been obvious to one ordinary skill in the art to use a precious gem as the authentication article in Abtahi et al. in Frankfurt because Abtahi et al. suggests the use of a card as an authentication article and Frankfurt further suggests the use of precious gem as an authenticating article in a card in order further ensure a unique card.

Regarding claims 37 and 39, Abtahi et al. teaches reading a fingerprint of a user analyzing the fingerprint to derive a first indication of the user and further detecting an authentication article in the form of a card for verifying the identity of a person (col. 5 line 55-column 6 line 4) but is silent on teaching detecting one or more features of a precious gem and analyzing the features of the gem to derive an indication of the user identity. Frnkfurt in an art related card security invention teaches the use of precious gem such as diamond as an authenticating article (col. 2 lines 26-35).

It would have been obvious to one of ordinary skill in the art to detect one or more features of a precious gem and analyzing the features of the gem to derive an indication of the user identity in Abtahi et al. in Frankfurt because Abtahi et al. suggests the use of fingerprint in association with a second authentication article to verify the identity of a person and Frankfurt teaches the use of precious gem such as diamond as an authenticating article in order to verify the identify of a person.

Claims 17-19 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of Frankfurt US Patent 4931629 and further in view of Russo U.S Patent 6681034.

Regarding claims 17 and 38, Abtahi et al. in view of Frankfurt teaches a card (58) as a portable device but is silent on teaching the card is a smart card, Russo in an art fingerprint

system teaches a smart card storing fingerprint template (col. 5 line 64-col. 6 line 1) and card further execute a fingerprint matching algorithm (col. 6 line 1-5).

It would have been obvious to one of ordinary skill in the art to have a smart card as a portable device in Abtahi et al. in view of Frankfurt as evidenced by Russo because Abtahi et al. in view of Frankfurt suggest a card as a portable device for providing identification information and Russo teaches a smart card storing fingerprint template for providing identification information.

Regarding claims 18-19, Abtahi et al. teaches a verification engine in operative relation with the computer system (col. 8 lines 1-6), the computer system is evidenced by the storing of files (col. 8 lines 5-8) which inherently include a computer.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abtahi et al. US Patent 5509083 in view of O'Connor et al. US Patent 5838306.

Regarding claim 35, Abtahi et al. teaches a fingerprint sensor for reading a user's fingerprint (col. 5 lines 57-60); and a feature detection sensor (60) in operative relation with the fingerprint sensor and having a housing that is configured to receive an authentication article, the feature detection sensor being configured to detect one or more predetermined features of said authentication article (col. 5 line 55-column 6 line 4) but is silent on teaching a fingerprint sensor disposed at a location such that when operating the apparatus in a normal manner, a user's finger of a user's hand rests in proximity to the fingerprint sensor. O'Connor et al. in an art related fingerprint security system teaches a fingerprint sensor disposed at a location such that when operating the apparatus in a normal manner, a user's finger of a user's hand rests in proximity to

the fingerprint sensor (col. 3 lines 55-61) in order to periodically acquiring a fingerprint for verifying the user's identity.

It would have been obvious to one of ordinary skill in the art for a fingerprint sensor disposed at a location such that when operating the apparatus in a normal manner, a user's finger of a user's hand rests in proximity to the fingerprint sensor in Abtahi et al. as evidenced by O'Connor et al. because Abtahi et al. suggests a fingerprint sensor for reading a user's fingerprint and O'Connor et al. teaches a fingerprint sensor disposed at a location such that when operating the apparatus in a normal manner, a user's finger of a user's hand rests in proximity to the fingerprint sensor in order to periodically acquiring a fingerprint for verifying the user's identity.

Allowable Subject Matter

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 13, the prior art of record fail to teach or suggests a fingerprint sensor detachably coupled to binoculars.

Claims 20-34 are allowed.

Regarding claims 20-34, the prior art of record fail to teach or suggests a pointing device, comprising a fingerprint sensor having a receiving portion that is configured to accept an authentication article and the authentication article disposed in proximity to the receiving portion and readable by said fingerprint sensor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U Brown whose telephone number is 703-305-3864. The examiner can normally be reached on M-Th, 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vernal Brown
May 13, 2004

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